

EVALUATION OF H. LÉVEILLÉ'S NEW HAWAIIAN SPECIES
Hawaiian Plant Studies 76

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Abbe Urbain Faurie was a French Catholic missionary to Japan. When so urged he made a plant collection, and sent it to Abbe (Augustin Abel) Hector Léveillé of Le Mans, France. Léveillé described a large percentage of them as new species, and named most of them *Fauriei*. Inspired by this distinction, Faurie made more and more collections, and finally resigned from the mission to become a plant collector. From April 1909 to June 1910 he explored the Hawaiian Islands, and collected some 1,160 numbers of plants.

On studying this Hawaiian collection (1911-1913) Léveillé published 114 of them as new species (or varieties). His diagnoses were about four or five lines in length, and seldom gave any measurements, or contained a comparison with the closest known species. His work was hasty and careless, and of his Hawaiian new species about half are synonyms of valid, earlier published species. J. F. Rock (1914) published a critical review of Léveillé's Hawaiian "novelties."

The writer is in general agreement with Rock's treatment, but subsequent monographs, and observations by the writer, have caused numerous changes. Consequently it is desirable to publish a new critique of the Hawaiian species published by Léveillé.

Of the 114 new Hawaiian taxa published by Léveillé 61 are synonyms, 5 have become basionyms, 2 are species dubia, and 46 are now accepted as good species or varieties.

Léveillé's Species arranged by Families according to Léveillé. The numbers are the collection numbers

Piperaceae

- Peperomia Fauriei* 108, Molokai
P. Helli 109, Molokai
P. refractifolia 123, Molokai = *P. Cookiana* C. DC.

Urticaceae

- Pipturus hawaiiensis* 508, Hawaii

Pittosporaceae

- Pittosporum Fauriei* 18, 38, Oahu = *P. glabrum* H. & A.
P. Hillebrandii 17, Molokai = *P. insigne* Hbd., var.
Hillebrandii (Lévl.) Sherff

Rosaceae

- Rubus Damieni* 805, Molokai = *R. hawaiiensis* Gray

Rubus Hillebrandii 802, 806, Hawaii, Maui = *R. hawaiiensis* Gray

R. Koehnei 801, Maui, published in 1911, hence the earlier, valid binomial, and *R. penetrans* Bailey, 1933, becomes a synonym.

Rutaceae

Pelea acutivalvata 172, Kauai = *P. peduncularis* Lévl.

P. Fauriei 104, 203, Molokai = *P. clusiaefolia* Gray, var. *Fauriei* (Lévl.) St. John & Hume

P. Feddei 194, Kauai

P. foetida 193, Maui = *P. molokaiensis* Hbd.

P. grandipetala 4, Oahu = in part *P. honoluluensis* St. John in part *P. peduncularis* Lévl.

P. Hillebrandii 183, 184, Kauai = *P. anisata* Mann

P. Leveillei 1, Kauai

P. nodosa 5, Kauai = *P. anisata* ?

P. oahuensis 11, 217, 217bis, Oahu

P. peduncularis 189, Oahu

P. penduliflora 9, Sandwich Is. = *P. peduncularis* Lévl.

P. singuliflora 194, 195, 224 = in part. *P. peduncularis* Lévl.; in part *P. Wawraeana* Rock

P. subpeltata 209, Kauai = *P. anisata* Mann

P. waianaiensis 215, Oahu = *P. peduncularis* Lévl., var. *quadrata* Stone

Euphorbiaceae

Euphorbia Hillebrandii 468, Oahu

Phyllanthus sandwicensis F. Muell., var. *hypoglauca* = *Breynia disticha* Forst f., f. *nivosa* (W. G. Sm.) Croizat

Aquifoliaceae

Byronia Helleri 280, Kauai = *Ilex anomala* H. & A.

Malvaceae

Hibiscus Fauriei 828, Oahu = *H. schizopetalus* (Mast.) Hook. f., fide Rock; or = *H. Arnottianus* Gray, fide Roe. These two species are strikingly different.

Neither of the botanists could have been mistaken, so there was doubtless a mixed number, with duplicate sheets, each with a different species.

Malva hawaiiensis 855, 858 = *M. moschata* L.

Sida Fauriei 5, Oahu = *Malvastrum coromandelianum* (L.) Garcke

S. oahuensis 839, Oahu = *Malvastrum coromandelianum* (L.) Garcke

S. sandwicensis 6, Sandwich Is. = *S. fallax* Walp.

Sterculiaceae

Waltheria Fauriei 841, Oahu - *Triumfetta Bartramia* L.

Violaceae

Isodendron (as *Isodendron*) *Fauriei* 693, Molokai = *Gouania Hillebrandii* Oliver in Hbd.

Viola sandwicensis 1, Oahu - *Cyrtandra sandwicensis* (Lévl.) St. John & Storey

Thymeliaceae

Wikstroemia Fauriei 548, Maui = *W. sandwicensis* Meisn.
in A. DC.

Myrtaceae

- X *Nania Fauriei* 27, Molokai. = *Metrosideros polymorpha*
Gaud., ssp. *incana* (Lévl.) Skotts., var. *Fauriei*
(Lévl.) Skotts.
- X N. *Feddei* 32, Kauai = *Metrosideros tremuloides* (Heller)
Rock, fide Rock, but that species is known only on Oahu.
- N. *macropus* (H. & A.) Ktze., f. *microphylla* 26, Kauai.
This has not been seen or placed.
- N. *polymorpha* (Gaud. Heller, var. *incana* 28, Molokai
= *Metrosideros polymorpha* Gaud., subsp. *incana*
(Lévl.) Skotts.
- N. *polymorpha* (Gaud.) Heller, var. *glaberrima* 35, Oahu.
= *Metrosideros polymorpha* Gaud. subsp. *glaberrima*
(Lévl.) Skotts.
- N. *polymorpha* (Gaud.) Heller, var. *nummulariaefolia* 34,
Hawaii. = *Metrosideros polymorpha* Gaud., var.
polymorpha.
- N. *polymorpha* (Gaud.) Heller, var. *sessilis* 32, Oahu.
This has not been seen or reassigned.

Araliaceae

Cheirodendron trigynum (Gaud.) Heller, var. *Hawaiensis*
262, = var. *trigynum*.
var. *Kauaiensis* 266 = *C. Fauriei* Hochr., Kauai.
var. *mauiensis* 265, Maui.

Ericaceae

Vaccinium Fauriei 700, 702, Molokai = *V. calycinum* Sm.,
var. *calycinum*, f. *Fauriei* (Lévl.) Skotts.

V. *hamatidens* 699, Kauai = *V. calycinum* Sm., var.
calycinum, f. *hamatidens* (Lévl.) Fosb.

Epacridaceae

Cyathodes imbricata Stschegl., var. *volcanica* 442, 445,
Hawaii = *Styphelia Douglasii* (Gray) F. Muell. ex Skotts.

Myrsinaceae

Myrsine Fauriei 422, 423, 427, Oahu = *M. Lessertiana* A. DC.
M. *molokaiensis* 435, Molokai = *Planchonella spathulata*
(Hbd.) Pierre, var. *molokaiensis* (Lévl.) St. John.
var. *punctata* 447, Kauai = *M. punctata* (Lévl.)
Wilbur.

M. *sandwicensis* A. DC., var. *mauiensis* 449, Maui.

M. *Vanioti* 448, Oahu = *M. sandwicensis* A. DC.

Suttonia apodocarpa 446, Kauai = *Myrsine punctata*
(Lévl.) Wilbur.

S. *cuneata* 2, 3, 431, Hawaii = *Myrsine Lessertiana* A. DC.

S. *flavida* 4, 5, Maui = *Myrsine Lessertiana* A. DC.

S. *mauiensis* 449, Maui = *Myrsine sandwicensis* A. DC.,
var. *mauiensis* Lévl.

S. *Meziana* 428, = *Myrsine Meziana* (Lévl.) Wilbur.

- Suttonia pukooensis* 426, Molokai = *Myrsine pukooensis* (Lévl.) Hosaka.
S. punctata 447, Kauai = *Myrsine punctata* (Lévl.) Wilbur
S. Vanioti 448, Oahu = *Myrsine sandwicensis* A. DC.
 Primulaceae
Lysimachia daphnoides Hbd., var. *Fauriei* 708, Oahu
 = *L. Hillebrandii* Hook. f. ex Gray.
 Apocynaceae
Alyxia (as *Alixia*) *myrtillaefolia* (Gray) Lévl., 455,
 Molokai = *A. olivaeformis* Gaud., f. *myrtillaefolia*
 (Gray ex Hbd.) St. John.
 Convolvulaceae
Ipomoea Fauriei 1,035, 1,049 = *I. stolonifera* (Cyrill.)
 J. F. Gmel.
I. koloaensis 1,036, Kauai = *I. stolonifera* (Cyrill.)
 J. F. Gmel. Rock called this *I. pes-caprae* Sw., so
 the several sheets under this number may have contained
 a mixture.
 Labiatae
Stenogyne Fauriei 911 = *Coleus Blumei* Benth.
 Solanaceae
Solanum Fauriei 861 = *S. nigrum* L.
 Scrophulariaceae
Herpestis Fauriei 1,126, Hawaii = *Bacopa Monnieria*
 (L.) Wettst.
Veronica hawaiiensis 892, Hawaii = *V. arvensis* L.
 Gesneriaceae
Cyrtandra asaroides in part, 623, Kauai = *C. oenobarba*
 Mann, var. *oenobarba*.
 in part, 624, Kauai = *C. oenobarba* Mann, var.
petiolaris (Wawra) Clarke
C. Fauriei 632, Molokai = *C. lysiosepala* (Gray) Clarke,
 var. *Fauriei* (Lévl.) Rock
C. Kamoloensis 646, Molokai = *C. Grayana* Hbd.
C. oahuensis 638, Oahu
C. Vanioti 1,144, Oahu
C. Wainihaensis 640, Oahu (probably = Kauai), not seen.
 Myoporaceae
Myoporum Fauriei 677, Molokai = *M. sandwicense* Gray,
 subsp. *Fauriei* (Lévl.) Kraenzlin
 Plantaginaceae
Plantago Fauriei 1,078, Kauai = *P. princeps* C. & S.,
 var. *longibracteata* Mann
P. Gaudichaudiana 1,075, Hawaii = *P. hawaiiensis* (Gray)
 Pilger, var. *hawaiiensis*
 Rubiaceae
Coprosma Fauriei 330, Kauai = *C. stephanocarpa* Hbd.
C. parvifolia = *C. stephanocarpa* Hbd. The data 324 and
 Molokai supplied by Rock (1914: 358).
Gouldia cirrhopetiolata 344, 416, Maui, Molokai.
 Of two different hybrids, fide Fosberg.

- Kadua herbacea* 368, Maui = *Hedyotis Cookiana* (C. & S.) Steud., var. *herbacea* (Lévl.) Fosb.
Straussia Fauriei 400, Oahu = *Psychotria Fauriei* (Lévl.) Fosb.
 Cucurbitaceae
Sicyos Fauriei 877, Oahu = *Momordica charantia* L.
 Lobeliaceae
Clermontia carinifera 10, Kauai = a species dubia, fide Rock.
C. Fauriei 578, Kauai = *C. clermontioides* (Gaud.) Heller
C. fulva 11, Kauai
Cyanea Blinii 575, Hawaii = *Clermontia parviflora* Gaud.
C. Fauriei 565, 591, Kauai = *C. coriacea* (Gray) Hbd., var. *Fauriei* (Lévl.) E. Wimm.
C. Feddei 567, Kauai = *C. fissa* (Mann) Hbd.
C. multispicata 576, 594, Kauai
C. salicina 569, Kauai. Described from a specimen with only leaves. Species dubia.
Delissea Fauriei 572, Molokai. Not seen by Rock, Wimmer, or the writer. The genus is otherwise unknown on Molokai.
Rollandia Fauriei 568, Kauai = *Cyanea spathulata* (Hbd.) Heller
 Goodeniaceae
X Scaevola Blinii 661, Kauai = *S. procera* Hbd.
S. Chamissonis Gaud, var. *caerulescens* 659, Kauai
S. Fauriei 651, Kauai = *S. Taccada* (Gaertn.) Roxb., var. *Fauriei* (Lévl.) St. John
 Compositae
Ageratum sandwicense 940, Maui, not seen, but probably = *A. conyzoides* L.
Campylotheca rutifolia = *Bidens Hillebrandiana* (Drake) Deg. ex Sherff
Cnicus hawaiiensis 963, Hawaii = *Cirsium arvense* L. ? fide Rock
Crepis molokaiensis 974, 976, Molokai = *Hypochoeris radicata* L.
Dubautia Fauriei 920, Maui - *D. laxa* H. & A., var. *hirsuta* Hbd.
Lipochaeta asymetrica 960, Oahu = *Bidens asymmetrica* (Lévl.) Sherff
L. Fauriei 1,012, Kauai
L. variolosa 1,008, 1,009, Molokai, Kauai = *L. succulenta* (H. & A.) DC., Gardner chose 1,008 as lectotype.
Raillardia Fauriei 1,015, Hawaii = *R. ciliolata* DC., var. *laxiflora* (DC.) Sherff

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